

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

April 22, 2015

Mr. Bob Andreoni Acushnet Rubber Company Inc. DBA Precix 744 Belleville Avenue New Bedford, MA 02745 **RE:** New Bedford

Transmittal No.: X265282 Application No.: SE-15-010

Class: *SM79-7* FMF No.: 130033

AIR QUALITY PLAN APPROVAL

Dear Mr. Andreoni:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the modification of Air Quality Plan Approval No. SE-14-026, dated December 16, 2014, and the proposed alteration and operation of your Ecast process located at 744 Belleville Avenue in New Bedford, Massachusetts ("Facility").

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

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## 1. DESCRIPTION OF FACILITY AND APPLICATION

Acushnet Rubber Company, Inc. DBA Precix (Precix) is a manufacturer of various custom molded rubber products and components. Precix has one facility, which is designated as Building B, located at 744 Belleville Avenue, New Bedford, Massachusetts. Precix's products consist of high tech rubber and elastameric applications that are utilized in the automotive, transportation, energy production and aerospace industries. Precix operates two distinct operations at the existing facility: Ecast (Urethane) products and Rubber products.

The Ecast (urethane) production process manufactures urethane seals and o-rings used in high pressure pumps by the oil and natural gas companies. Urethane polymer is heated and dispensed into small containers, which are heated on warming tables. The containers are moved to the mixing area where a curing agent is added. The mixed product is then poured into pre-made molds and cured in a steam curing press. The mold release agents contain no volatile organic compounds or HAPs. The paddles used in the mixing area are cleaned with a solvent based cleaner. Once the molds are cured, they are transferred to the Post Cure Oven for final curing before they are packaged.

The rubber production process includes mixers, presses, curing ovens, and Permanent Mold Release (PMR). The process manufactures products such as, but not limited to, seals and Orings. The mixers are used to mix various type of rubber. The presses are used to cure the rubber in the desired shapes and sizes for the final products. The curing ovens are used to post-cure the majority of the rubber O-rings and various other products. The PMR operation takes place in a spray booth where PMR materials are applied to the metal molds used in the rubber presses.

On December 16, 2014, the MassDEP approved a Non-Major Comprehensive Plan Approval No. SE-14-026 which allowed the modification of an existing curing oven and installation of five new curing ovens for Precix's rubber presses. The Plan Approval also approved the increase of urethane production as well as paddle cleaner usage associated with the Ecast process.

On March 30, 2015, Precix submitted application No. SE-15-010 in order to modify Plan Approval No. SE-14-026. In their application, Precix has proposed to increase its Ecast (urethane) production process with the installation of additional equipment, which includes three polymer mixing stations, three batch ovens and three new curing presses. Each of these three new mixing stations will have its own dedicated fume hood and exhaust stack.

In addition, Precix has also indicated that based on vendor's information a new diphenylmethane diisocyanate (MDI) emission factor has been determined. As a result, potential emissions from the use of polymer material that contains MDI (previously identified as EU #42 in Approval No. SE-14-026) are below one ton per year. In accordance with 310 CMR 7.02(2)(b)(7), EU #42 is

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exempt from Plan Approval based upon *de-minimis* increase in emissions. Precix has an obligation to maintain appropriate records to maintain compliance with the exempt status.

Precix demonstrates Best Available Control Technology through the use of Best Management Practices when handling VOC containing materials in the Ecast area, such as: keeping containers closed when not in use; when an entire container of VOC containing material is not consumed, the container will be capped, and the remaining amount of material will be used for the next batch; following manufacturer's specifications; and immediately cleaning up any drips or spills.

## 2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

	Table 1				
EU#	Description	Design Capacity	Pollution Control Device (PCD)		
4	Banbury	5,000 lbs rubber per hour	Baghouse		
13	Rubber Mix Cleaner	N/A	None		
14	Mill Mining	220 lbs mybbon man boyn	None		
16	Mill Mixing	230 lbs rubber per hour	None		
20	Rubber Post Curing Ovens	1,105 lbs rubber per hour	APC Model 502 Ultra High Efficiency filter		
18	18 small curing ovens – lab use 125 lbs rubber per hour		None		
21	PMR Spray booth	1.07 gal per hour	Paper filter		
35	Rubber Presses	830 lbs rubber per hour	None		
41	Color Tilt Mixer	1,000 lbs rubber per hour	Baghouse		
43	Black Tilt Mixer	855 lbs rubber per hour			
44	Paddle cleaner	N/A	None		

#### Table 1 Key:

EU# = Emission Unit Number PCD = Pollution Control Device

lbs = pounds gal = gallons N/A = Not Applicable

PMR = Permanent Mold Release

# 3. <u>APPLICABLE REQUIREMENTS</u>

## A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

	Table 2					
EU#	Operational / Production Limit	Air Contominant				
4	1. ≤ 50,000 pounds of rubber per month	HAPs (Total & individual)	≤ 0.004 TPM ≤ 0.04 TPY			
	2. ≤ 500,000 pounds of rubber per year	VOC	≤ 0.01 TPM ≤ 0.11 TPY			
13	<ul> <li>3. ≤ 5 gal/month</li> <li>4. ≤ 55 gal/yr</li> </ul>	VOC	$\leq$ 6.84 lbs VOC/gal $\leq$ 0.02 TPM $\leq$ 0.19 TPY			
1.4	5. ≤2,000 pounds of rubber per month	HAPs (Total & individual)	≤ 0.01 TPM ≤ 0.01 TPY			
14	6. ≤20,000 pounds of rubber per year	VOC	≤ 0.01 TPM ≤ 0.01 TPY			
20	<ul> <li>7. ≤301,600 pounds of rubber per month</li> <li>8. ≤3,016,000 pounds of rubber per year</li> </ul>	HAPs (Total & individual)	≤ 0.01 TPM ≤ 0.01 TPY			
20		VOC	≤ 0.91 TPM ≤ 9.06 TPY			
18	9. Record keeping	HAPs (Total & individual)	≤ 0.01 TPM ≤ 0.01 TPY			
10		VOC	≤ 0.01 TPM ≤ 0.01 TPY			
21	10. ≤ 100 gal/month 11. ≤ 1,000 gal/yr	VOC	7.45 lb VOC/gal ≤ 0.37 TPM ≤ 3.72 TPY			
25	12. ≤ 377,000 pounds of rubber per month 13. ≤ 3,770,000 pounds of rubber per year	HAPs (Total & individual)	≤ 0.19 TPM ≤ 1.91 TPY			
35		VOC	≤1.26 TPM ≤ 12.6 TPY			
41	14. ≤ 75,000 pounds of rubber per month	HAPs (Total & individual)	≤ 0.003 TPM ≤ 0.03 TPY			
41	15. ≤ 750,000 pounds of rubber per year	VOC	≤ 0.003 TPM ≤ 0.03 TPY			

Table 2 (continued)				
EU#	Operational / Production Limit	Air Contaminant	Emission Limit	
12	16. ≤ 150,000 pounds of rubber per month 17. ≤ 1,500,000 pounds of rubber per year	HAPs (Total & individual)	≤ 0.003 TPM ≤ 0.03 TPY	
43		VOC	≤ 0.01 TPM ≤ 0.06 TPY	
44	18. 255 gal/month 19. 1,020 gal/yr	VOC	≤ 1.82 TPM ≤ 3.98 TPY	
		HAPs (maximum individual)	≤ 1.91 TPY	
	Facility-wide	HAPs (total)	≤ 3.03 TPY	
		VOC	≤ 31.81 TPY	

#### Table 2 Key:

EU# = Emission Unit Number

HAP (single) = maximum single Hazardous Air Pollutant

HAP (total) = total Hazardous Air Pollutants VOC = Volatile Organic Compounds

TPM = tons per month

TPY = tons per consecutive 12-month period gal/yr = gallons per consecutive 12-month period

gal/month = gallons per month lbs VOC/gal = pounds VOC per gallon

### B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3					
EU#	Monitoring and Testing Requirements				
Facility- Wide	1. The Permittee shall monitor operations of each emission unit to verify compliance with the operational limitations contained in Table 2 above.				
	2. The Permittee shall monitor operations of each emission unit to verify compliance with the emission limitations contained in Table 2 above.				

Table 3 (continued)					
EU#	Monitoring and Testing Requirements				
	3. The Permittee shall monitor all maintenance related activities that may affect air contaminant emission rates.				
	4. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.				
Facility- Wide	<ol> <li>If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.</li> </ol>				
	<ol> <li>At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for approval a stack emission pretest protocol.</li> </ol>				
	7. Within 45 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report.				

### Table 3 Key:

EU# = Emission Unit Number

CMR = Code of Massachusetts Regulations

MassDEP = Massachusetts Department of Environmental Protection USEPA = United States Environmental Protection Agency

Table 4					
EU#	Record Keeping Requirements				
Facility- Wide	1. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 <sup>th</sup> day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at <a href="http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping">http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping</a> .				
Wide	2. The Permittee shall maintain records of monitoring and testing as required by Table 3.				
	3. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.				
	4. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.				

Table 4 (continued)						
EU#		Record Keeping Requirements				
	5.	The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.				
Facility- Wide	6.	The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.				
	7.	The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.				
	8.	The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.				

#### Table 4 Key:

EU# = Emission Unit Number PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure USEPA = United States Environmental Protection Agency

CMR = Code of Massachusetts Regulations

MassDEP = Massachusetts Department of Environmental Protection

Table 5					
EU#	Reporting Requirements				
	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).				
Facility- Wide	2. The Permittee shall notify the Southeast Regional Office of MassDEP, BAW Compliance& Enforcement Chief by telephone: 508-946-2878, email: sero.air@state.ma.us, or fax:508-947-6557, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Compliance & Enforcement Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).				
	3. The Permittee shall report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.				

Table 5 (continued)						
EU#		Reporting Requirements				
	4.	The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's request.				
Facility- Wide	5.	The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.				
	6.	The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.				

#### Table 5 Key:

EU# = Emission Unit Number

MassDEP = Massachusetts Department of Environmental Protection

CMR = Code of Massachusetts Regulations

BAW = Bureau of Air and Waste

## 4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6					
EU#	Special Terms and Conditions				
Facility- Wide	<ol> <li>This Plan Approval, Transmittal No. X265282, supersedes the following Approvals:         <ul> <li>a. Plan Approval 4P08070, transmittal No. X225883, dated January 28, 2009</li> <li>b. Plan Approval 4P11014, transmittal No. X237414, dated May 12, 2011</li> <li>c. Plan Approval 4B09041, transmittal No. X231071, dated January 20, 2010</li> <li>d. Restricted Emission Status Approval 4R95004, dated June 22, 1995</li> <li>e. 50% Facility Emission Cap Approval dated January 28, 2009</li> <li>f. Plan Approval SE-14-026, transmittal No. X262314, dated December 16, 2014</li> <li>The listed Approval Letters shall be deemed null and void. The underlying applications for the Plan Approvals herein shall remain valid.</li> </ul> </li> </ol>				

Table 6 Key:

EU# = Emission Unit Number

No. = Number

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as "shanty caps" and "egg beaters."
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7					
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)	
4	45	2	250	70-80	
13	Fugitive Emissions	N/A			
14	18 (2 total) 1.2 10		70-80		
20	30 (2 total)	1.33	48	80-100	
18	15	0.7	10	50-900	
21	40	1.2 10		70-420	
35					
41	Fugitive Emissions		N/A		
43					
44	40 (4 total)	0.83	16.3	70-80	

#### Table 7 Key:

 $\begin{array}{ll} EU\# & = Emission \ Unit \ Number \\ ^{o}F & = Degree \ Fahrenheit \\ N/A & = Not \ Applicable \end{array}$ 

# 5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the

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Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between

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provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

## 6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

## 7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

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Should you have any questions concerning this Plan Approval, please contact Elza Bystrom by telephone at 508-946-2856, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing Permit Chief Bureau of Air and Waste

#### Enclosure

ecc: New Bedford Health Dept

New Bedford Fire Dept MassDEP/SERO (M. Pinaud) MassDEP/SERO (L. Black) MassDEP/Boston (Y Tian) Tighe & Bond, Inc. (D. Stellato)